Statement of Basis - Narrative Title V Permit

Type of Permit Action: Permit renewal

Facility: Los Alamos National Laboratory

Company: U.S. Department of Energy National Nuclear Security Administration **Permit No(s).**: 632, 634-M2, 1081-M1, 1081-M1-R1, 1081-M1-R3, 1081-M1-R5, 1081-M1-R6,

2195B-M2, 2195F-R4, GCP-3-2195G, 2195H, 2195N-R2 and 2195P-R2 and P100-R2

Tempo/IDEA ID No.: 856 - PRT20130004

Permit Writer: Daren Zigich

Pe	Date to Enforcement: 12/17/14	Inspector Reviewing: Sondra Sage	
rm	Date Enf. Review Completed: 1/7/15	Date of Reply: NA	
it R	Date to Applicant: 12/17/14	Date of Reply: 1/15/15	
evie	Date of Comments from EPA: N/A	Date to EPA: 12/17/14	
W	Date to Supervisor: 2/27/15 final		

1.0 **Plant Process Description:**

The Laboratory is an R&D institution owned by DOE/NNSA and operated by Los Alamos National Security, LLC. It falls under the Standard Industrial Classification (SIC) 8733 - Noncommercial Research Organization. The primary mission of the Laboratory is to ensure the integrity and safety of the United States' current stockpile of nuclear weapons and nuclear materials. Laboratory scientists and engineers accomplish this mission and other non-weapons related research through acquisition of annual funding from various federal departments to support R&D activities. In order to support these activities, the Laboratory operates an infrastructure of industrial-type operations that provide electricity, building and process heating and cooling, general construction and maintenance, and road repair. These activities include, but are not limited to, the following:

- External combustion sources including steam generation for general building heat, process heat, or for electricity generation for local consumption;
- Internal combustion engines such as standby generators to provide emergency power to buildings and operations; and
- Asphalt production for road repair.

Industrial-type activities are responsible for the majority of the Laboratory's emissions of regulated air pollutants.

2.0 **Description of this Modification:**

This permit action is for the second renewal of the Title V permit. The permittee requests the changes listed in the following table.

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Section Affected	Proposed Change	
Part A Facility Specific Requirements	No changes requested.	
Beryllium Activities Section A700.A and A701.A	Revise process description for TA-3-66 to better reflect three core functions.	
Beryllium Activities Sections A707.A and A707.B	For TA-3-66, revise description from "polishing" to "metallographic operations" to reflect the core function.	
Beryllium Activities Section A707.D	Revise reporting requirement for TA-3-66 to require semiannual emission reports in the same manner as other regulated beryllium sources.	
Asphalt Production Section A605.A	Remove restriction to use only propane and cite all fuels allowed by GCP-3-2195G.	
Asphalt Production Section A607.A	Insert additional requirement to observe and record pressure drop reading across fabric filter once per operational day.	
Asphalt Production Section A607.C	Clarify monthly opacity reading is required only during months the plant operates.	
External Combustion Section A807.D	Remove reference to initial boiler testing with fuel oil. The requirement was removed from NSR Permit 2195N by a technical revision on 9/25/2012.	
Chemical Usage	No changes requested.	
Degreasers	No changes requested.	
Internal Combustion Section A1100.A	A new stationary emergency use diesel generator should be added to the regulated source list. The unit is exempt from NSR but not Title V permitting. It is assigned Unit No. TA-48-GEN-1.	
Internal Combustion Section A1103.A	Indicate the NSPS Subpart IIII is applicable to new Unit No. TA-48-GEN-1.	
Internal Combustion Section A1104.A	Request removal of the 168 hour per year restriction on standby generator pool.	
Internal Combustion Section A1104.B	Request change to language in monitoring requirement to clarify intent and match language in recordkeeping requirement.	
Internal Combustion Section A1104.B and C	Clarify recordkeeping requirement applies to criteria and hazardous air pollutants.	
Internal Combustion Section A1104.D	This requirement from the NSPS Subpart IIII applies to new Unit No. TA-48-GEN-1.	
Internal Combustion Section A1107.A and B	These NSPS Subpart IIII requirements apply to new Unit No. TA-48-GEN-1.	
Data Disintegrator Section A1204.A	An annual process restriction is requested for the number of boxes processed to lower pre-control device potential to emit.	
TA-3 Power Plant	No changes requested.	
Open Burning	No changes requested.	
Part B General Conditions	No changes requested.	

In addition, the following previously permitted changes, via the NSR permitting process, are included or accounted for (if insignificant) this permit renewal.

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- 2195-R59 5/14/13 Admin Revision 1 standby generator at TA50. Will need NSPS conditions.
- 2195P-R2 8/27/13 Admin Revision Allowed 2 portable generators at TA33 to relocate to another single location as needed (you visited this site last year during the inspection)
- 2195F-R4 12/12/13 Technical Revision Replaced stationary generator TA33 with existing LANL portable unit
- 2195P-R3 1/3/14 Admin Revision Allows 3 portable generators to operate at 4 different locations.
- 2195-R63 4/4/14 Admin Revision 2 standby generators at TA55. Will need NSPS conditions. This was issued as R61 but then corrected to R63.
- Additional change The TA3 Power Plant boilers need to have imposed the same annual
 use restriction as the 3 CMRR RULOB boilers. See existing permit condition A804.B
 which limits operation on fuel oil to no more than 48 hours per year for non-emergency
 maintenance and readiness testing. Need this for Boiler NESHAP exemption.

3.0 Source Determination:

- 1. The emission sources evaluated include the entire set of complexes and Technical Areas that, in total, comprise the Los Alamos National Laboratory.
- 2. Single Source Analysis:
 - A. <u>SIC Code</u>: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes
 - B. <u>Common Ownership or Control:</u> Are the facilities under common ownership or control? Yes
 - C. <u>Contiguous or Adjacent:</u> Are the facilities located on one or more contiguous or adjacent properties? Yes
- 3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes? Yes

4.0 **PSD Applicability:**

Title V action does not determine PSD applicability; see the History Table for a summary of previous PSD applicability determinations.

5.0 <u>History (In descending chronological order, showing NSR and TV):</u> *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
P100-R2	2/27/15	Title V renewal	8
			P100R1M3 issued 4/26/13.
*2195X	6/20/14	NPR	spray evaporation system (TA-60-EVAP)
*2195LR1	5/29/14	NPR	Two soil vapor extraction units (TA-54-SVE, East and
			West)

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
*2195PR3	1/3/14	Admin Rev	Temporary relocation of all diesel generators permitted under NSR permit 2195P.
*2195FR4	12/12/13	Tech Rev	Replacement of stationary TA-33-G-1 with a portable unit. Eliminates 40 CFR Subpart ZZZZ applicability.
2195PR2	8/27/13	Admin Rev	Temporary relocation of 2 20KW gensets from TA-33 to TA-39
P100R1M3	4/26/13	Admin Rev	Removal of four retired boilers (TA-48-1-BS-2 & 6 and TA-59-1-BHW-1 &2) from list of regulated sources
P100R1M2	12/26/12	Admin Rev	Retirement of four boilers (TA-48-1-BS-2 & 6 and TA-59-1-BHW-1 &2) from list of regulated sources
*2195PR1	11/20/12	Admin Rev	NOE for two (2) process related, Honda gasoline-fired portable generators, and the capacity of 2.8 hp (2.1 KW) each for Technical Area No.33
*2195NR2	9/25/12	Tech Rev	Remove initial compliance testing on backup fuel oil.
P100R1M1	6/15/12	Title V Significant Modification	Incorporates NSR 2195BM2
*2195B-M2	11/1/11	Tech Rev	Increase allowable annual natural gas fuel consumption by the Combustion Turbine and reduce annual allowable fuel oil usage.
2195U	9/20/10	NPR	RLWTF (TA-50) Thermal Evaporation Unit
2195T	12/16/09	NPR	Emergency Operation Center Portable Generator
*P100R1	8/7/09	Title V Renewal	Incorporates changes since P100R1: 2195NR1, 2195F-R2, P100M2, and 2195P. Also includes 1081-M1-R6, prior to P100M1. For specific changes see 2.0 Description of this Modification above.
2195B-M1-R2	3/5/09	Technical Rev	Changed the method for monitoring emissions from the CT, from a calculation based on fuel usage to direct measurement of stack emissions using a portable analyzer. This permit supersedes all portions of Permit No. 2195B-M1-R1, except the portion requiring compliance tests.
2195B-M1-R1	10/14/08	Admin Rev	This revision consists of establishing use and exempt status of the following two emergency generators: 1) 1100 kW Cummins Generator, Model KTA50-G2 Location: TA-16 Weapons Engineering Tritium Facility (WETF), Bldg. 980 2) 1250 kW Cummins Generator, Model DFLC-5554001 Location: TA-3 Power Plant, Bldg. 1404
2195F-R3	5/28/08	Technical Rev	Modification to recordkeeping condition 4.a to record the kilowatt-hours produced on a daily basis instead of the hourly basis required by the current permit. This permit supersedes all portions of Air Quality Permit 2195F-R2, except the portion requiring compliance tests.

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195N-R1	12/20/07	Admin Rev - NOE	Processed exempt sources: (3) three 1500 kW Cummins diesel powered generators to be located at Technical Area 55, Chemistry and Metallurgy Research Replacement Facility (CMRR). Request received on Dec. 11, 2007. (Note this letter should have been number 2195N-R2.)
2195S	11/25/07	NPR	NPR for power generation in TA-49-G1. The portable generator shall consist of one 10 kW generator powered by a diesel engine rated at 20.2 kW (27 hp), Cummins Onan diesel fueled generator with a Kubota engine.
2195P	8/8/07	New NSR	Construction and operation of three electrical generator engines at Technical Area 33. The function of the generator engines is to provide electricity for experiments in support of classified research.
P100M2	7/16/07	Admin Amendment	Retired Beryllium operations at the Chemistry and Metallurgy Research Facility at TA-3-29.
2195Q	1/30/07	NPR	NPR for the construction and operation of two micro electric discharge machines used to create small holes in beryllium gaskets at LANL, TA-39-89. This application was submitted as a follow up to the Department's June 22, 2005 determination (See 2195-O) that the micro electric discharge machines required a permit.
2195F-R2	6/26/06	Admin Rev	Corrected a typographical error on the generator serial number and model number.
P100M1	6/15/06	Title V Modification	Removed the Paper Shredder located at TA-52-11 and replaced it with the Data Disintegrator; removed Boilers TA-16-1485-BS-1 and BS-2, and the portable rock crusher; and installed a new 25 MW simple cycle natural gas turbine at the Power Plant at TA-3. P100M1 supersedes permit P100.
*Various	6/14/06	Admin Rev	Changed the name of the facility operator from the University of California to Los Alamos National Security, LLC (LANS). (632-R1, 634-M2-R1, 1081-M1-R7, NPR 2195A-R1, 2195B-M1R1, 2195F-R1, GCP-3-2195G-R1, 2195H-R1, NPR 2195L-R1, 2195N-R1, 2195R-24, NOI 2597-R1.)
*1081-M1-R6	5/12/06	Technical Rev	Replaced permitted vacuum furnace (1081M1R3) with a CM Model 1712 electric furnace. Modifies 1081-M1.
2195K-R1	1/12/06	Admin Rev – Closed	Canceled permit 2195K due to LANL no longer needing to perform the types of testing and activities authorized by the permit.
2195J-R1	1/17/06	Admin Rev – Closed	Canceled permit 2195J due to LANL no longer needing to perform the types of testing and activities authorized by the permit. Request received on Jan. 12, 2006.

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195N	9/16/05	New NSR	Authorized the construction and operation of phases A and B of the Chemistry and Metallurgy Research Building Replacement ("CMRR") facility. This facility consists of the Radiological Laboratory /Office Building ("RLOB") and the Utility Building ("UB"). Together, the two buildings are identified as the RLUOB. The function of the UB is to provide utility infrastructure and support to the CMRR facility.
2195O	6/22/05	Denial of NPR – Closed	The proposed research activity will use Electric Discharge Machines (EDM) to cause a static discharge and form a 50-µm-diameter hole in a beryllium gasket submerged in dielectric fluid. The Micro EDM device meets the definition of a "Machine Shop" found at 40 CFR § 61.31(d) and therefore the proposed research activity is subject to 40 CFR Part 60, Subpart C, National Emission Standard (NESHAP) for Beryllium. Therefore, a construction permit is required.
2195K	3/29/05	New NSR – Closed	This permit application is in response to NMED's 8/19/03 request that LANL submit a permit application pursuant to 20.2.72 for existing open burning activities which would not be allowed under 20.2.60 Open Burning. Technical Area - 36 ("TA") Sled Track is part of LANL's Dynamic Experimentation ("DX") Division. Permit Closed with 2195K-R1.
2195J	3/29/05	New NSR – Closed	This permit application is in response to NMED's 8/19/03 request that LANL submit a permit application pursuant to 20.2.72 for existing open burning activities which would not be allowed under 20.2.60 Open Burning. TA-16 Flash Pad uses an open flame generated from propane burners on a concrete pad to ignite or burn residual HE material from equipment used at the LANL (e.g. piping, office furniture etc.,). Permit Closed with 2195J-R1.
2195B-M1	7/30/04	Regular Sig. Rev	Authorizes the modification and operation of the Technical Area – 3 Power Plant (TA-3). This permit supercedes all portions of Air Quality Permit No. 2195B-R1
P100	4/30/04	New Title V	New operating permit issued for the facility.
*2195H	10/23/03	New NSR	Authorized the construction and operation of a 1200 lb/hr Data Disintegrator at TA-52.
2195I	08/28/03	NOI – Withdrawn	Withdrawn - NOI proposing to install a screening plant at LANL.
2195B-R2	5/15/03	Admin Rev - NOE	This revision consists of a change in the site support services subcontractor and operator of the TA 3-22 Power Plant. KSL Services will be the new subcontractor and operator effective February 2003. Request received on March 5, 2003.
741-R1	11/25/02	Admin Rev – Closed	Surrendered Air Quality Permit 741 for the facility. Request received on Oct. 25, 2002. The construction never took place; therefore, the permit is no longer needed.

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
635-R1	11/25/02	Admin Rev – Closed	Surrendered Air Quality Permit 635 for the facility. Request received on Oct. 25, 2002. The final beryllium activities were conducted in the facility in Jan. 2001; thus the machine shop will be decommissioned. No further beryllium activities will occur at the facility and the permit is no longer needed.
2195B-R1	11/21/02	Technical Rev	Revised/Replaced emission limits table 2.1 in Permit 2195B.
*GCP-3- 2195G	10/29/02	GCP-3	New GCP-3 Permit, 80 tph asphalt plant
2195F	10/10/02	New NSR	Construction and operation of a diesel fired 1500 kW generator at TA-33.
2195E	7/17/02	NPR - Closed	NPR - Pug mill for soil remediation. The equipment was never installed and dropped from consideration. (Activity closed from Tempo on 6/7/06.)
*1081-M1-R5	02/21/02	Technical Rev	Modification of weld bead dress description
2597	9/6/01	NOI	Replacement of two existing Keewanee 8.368 MMBTU/hr boilers with two Sellers 14.645 MMBTU/hr boilers at TA-55, PF6.
2195A	1/9/01	NOI – NPR	Construction and operation of a new woodshop as a separate facility. Results are too low to trigger 2.72 or 2.73. Second letter issued on Feb. 07, 2002 due to revised application, acknowledges NPR.
1081-M1-R4	11/27/00	Admin Rev	Removed 77 HP standby generator that was added during revision 2 in Dec. 1998.
2195B	9/27/00	New NSR	Authorized the modification and operation of the Technical Area – 3 Power Plant.
*1081-M1-R3	02/11/00	Technical Rev	Revision 1) limited Beryllium emissions based to throughput instead of cutting / machining time; 2) replaced the one hour emission limit with a 24 hour emission limit from 40 CFR 61, subpart C, section 61.32, i.e., 10 grams of Be per 24 hours; and 3) added a vacuum induction melt furnace operation for melting down classified shapes of machined Beryllium components. Supersedes many portions of 1081-M1 and 1081-M1-R1.
1081-M1-R2	12/1/98	Admin Rev	Added 77 HP standby generator as an exempt source. Request received on Oct. 2, 1998.
*634-M2	11/2/98	Admin Rev	Revision consists of installing a 100 MBTU/hr evaporator for the purpose of reducing the volume of coolant waste generated. No revision number was assigned to this Admin Rev.
*634-M2	10/30/98	Modification	Modified permit for Be machining and foundry operations. Established maximum annual throughput of 10,000 lbs Be, facility-wide 24 hr and annual Be emission limits, Be control requirements, and continuous stack monitoring for Be. Application received on September 23, 1997. This permit supersedes all portions of Permit 634-M1.

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
*1081-M1-R1	3/11/98	Revision	Required that emissions generated from weld cutting, dressing, and metallography operations be routed through HPA filtration having 99.95% control efficiencies and specified the testing requirements based on accessibility to the HEPA filters.
*1081-M1	7/1/94	Modification	Allowed for the use of lubricant baths instead of kerosene baths in the cutting and grinding operations. The original permit only allowed for grinding to eliminate rough edges. Cutting will produce less fine particles, and therefore is both cleaner and easier to control. Supersedes all portions of 1081, except the portion requiring compliance testing.
1081	11/25/92	New NSR	Authorized beryllium machining operation in TA-55, Building 4.
741	4/26/89	New NSR	Permit to construct a beryllium processing facility within TA 3-35. Closed with 741-R1.
634-M1	9/8/87	Modification	Maximum process rate is limited to 2.0 pph of beryllium and not to exceed the estimated emission rate specified in section 5 of the permit application. Supersedes permit 634.
636	3/19/86	New NSR – Closed	Construction and operation of a beryllium machine shop in TA-3, building102. LANL surrendered permit 636 on Feb. 20, 2004. Final beryllium activities were conducted at the facility in CY 2000.
635	3/19/86	New NSR – Closed	Modification of beryllium machine shop in TA 3, building 39. Closed with 635-R1.
634	3/19/86	New NSR	Construction and operation of a beryllium machine shop in TA-3, building141.
*632	12/26/85	New NSR	Construction and operation of a beryllium machine shop in TA-35, building 213.

History of Permit 2195¹

A separate history table was created as Permit 2195 pertains only to exempt activities and sources.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195R-64	6/27/14	Admin Rev - NOE	NOE to acknowledge nine (9) Gas-fired Heaters; two (2) heaters at the TA-55 location will have the capacity of 0.06 MM BTU/hr. and the remaining eight heaters at the TA-35/294 location will have the capacities of 0.04 MM BTU/hr.
2195R-63	4/4/14	Admin Rev - NOE	Exemption for two (2) Stand-by Generators Sets: two (2) 20 Kw Whisper Watt, DCA-25SSi U4F SN 7150008, 7150066 generators; and two (2) 30 Kw Isuzu, BZ-4LE2T, SN 4LE2-298868, 4LE2-299432 engines, at TA-55: PF-10 and PF-11
2195R-62			Never Issued.
2195R-61			Issued as 2195R-63.

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195R-60			Never issued – Issued under 2195F-R4 (12/12/13).
2195R-59	5/14/13	Admin Rev - NOE	Exempt 100 kW Emergency Onan Sons Model No.DGDB4487482 Standby Diesel Generator with the SN 1000147417 to be located at Technical Area (TA) 50, Building 69.
2195R-58	5/14/13	Admin Rev - NOE	Exempt 75,100 BTUY/hr. Natural Gas Fired A.O. Smith Conservationist Model No.BT-100 Hot Water Heater, with SN B006209E6Y, to be used for comfort located at Technical Area (TA) 60, Building 175.
2195R-57	3/18/13	Admin Rev - NOE	Exempt Emergency Stand-by 150 kW Cummins Diesel Generator Set, Model No.150DSGAC-6298553, Serial No.L100178636 and powered by a Cummins diesel engine, Model No.QSB7-G3 NR3 to be located in Technical Area (TA) 48, Bldg.1.
2195R-56	12/26/12	Admin Rev - NOE	4 Bryan water tube Natural Gas Boilers at 3 million BTU/hr. each, Model HE-AB300-W-FDG-LX in Technical Area 59, Building 1 to be used for personal comfort.
2195R-55	11/8/12	Admin Rev - NOE	4 Exempt Comfort Heaters at Technical Area 16, Building 1552: two (2) RUPP Air Management Systems Direct Fired Comfort Heaters, Model RAM- 33, 1,847,578 BTU/hr. each; one (1) Reznor hanging unit heater, Model UDAS-30, 30,000 BTU/hr.; and one (1) Reznor indirect fired make-up air unit, Model PDH-75, 75,000 BTU - all fueled with Natural Gas.
2195R-54	10/5/12	Admin Rev - NOE	8 Lochinvar Crest Condensing Boileres, 2.5 MMBTu/hr each, Model FBN2500 with Natural gas fuel for comfort and personal use in TA-48 Building 1.
2195R-53	10/5/12	Admin Rev - NOE	Exempt Cooling Tower, Model No. TTXL-101930 at TA-53 Building 2.
2195R-52	6/12/12	Admin Rev - NOE	Greenheck Direct Natural Gas-Fired Heater, Model VSU-220-H40, 981,100 BTU/hr. capacity, to be used for personal comfort at Technical Area 16, Building 1550
2195R-51	5/2/12	Admin Rev - NOE	Two comfort heaters at TA60-17
2195R-50	12/30/11	Admin Rev - NOE	One personal comfort boiler at TA48-1
2195R-49	12/30/11	Admin Rev - NOE	One nonroad and NSR exempt generator (TA50 or 55)
2195R-48	8/30/11	Admin Rev - NOE	Two portable gensets
2195R-47	8/30/11	Admin Rev - NOE	Four comfort heaters at TA48-1

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195R-46	8/2/11	Admin Rev - NOE	Exempt evaporator at TA3-39
2195R-45	7/28/11	Admin Rev - NOE	Exempt cooling tower at TA55-6
2195R-44	4/27/11	Admin Rev - NOE	Four comfort heaters at TA16-204
2195R-43	2/8/11	Admin Rev - NOE	Two exempt comfort boilers at TA59-1
2195R-42	12/1/10	Admin Rev - NOE	Exempt genset at TA55-371
2195R-41	6/15/10	Admin Rev - NOE	13 exempt bulb crushers
2195R-40	12/23/09	Admin Rev - NOE	Exempt genset at TA21-MDA#B
2195R-39	11/25/09	Admin Rev - NOE	Exempt comfort boiler at TA39-2
2195R-38	11/21/08	Admin Rev - NOE	Added exempt equipment: a natural gas-fired LAARS comfort boiler with low NOx burners, design rating 0.999 MMBtu/hr, located at Technical Area (TA) 3, Bldg. 1410; a natural gas-fired A.O. Smith Water Products Co. hot water heater, design rating 0.04 MMBtu/hr, located at TA 3, Bldg. 1410; and a natural gas-fired TRANE heater, design rating 0.7 MMBtu/hr, located at TA 3, Bldg. 1410.
2195R-37	3/20/08	NPR	Construction and operation of TA-16 Alternative Fueling Station. Results demonstrate that emissions from the units are too low to trigger 20.2.72 or 20.2.73. Facility shall comply with 40 CFR 63, Subpart CCCCCC. Request received on March 12, 2008.
2195R-36	10/12/07	Admin Rev - NOE	Added exempt equipment: a 60 Kw Cummins diesel- powered generator and an associated 145 gallon tank, located at Tech. Area 35, Building 402. Request received on Oct. 9, 2007
2195R-35	10/12/07	Admin Rev - NOE	Added exempt equipment: a 530 KW Cummins diesel powered generator and an associated 1351 gallon tank, located at Tech Area 50, Building 250. Request received on Oct. 9, 2007.
2195R-34	9/28/07	Admin Rev - NOE	Exempted two natural gas fired Thermal Solution boilers, each with a design rate of 0.175 MM BTU/hr, located at TA 50, Building 54. The units will be used seasonally to provide hot water for building heat for personal comfort Request received on Aug. 31, 2007.
2195R-33	7/6/07	Admin Rev - NOE	Exemption for one 400 Kw Cummins diesel powered generator and associated 300 gallon tank, located at Technical Area 3, Building 1400. Request received on June 27, 2007.

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195R-32	4/23/07	Admin Rev - NOE	Construction of a 452,000 btu/hour natural gas fired Parker boiler located at Technical Area 9, Building 265. This boiler replaces a 0.279 MMBTU/hr boiler covered under 2195-R2. Request received on April 16, 2007.
2195R-31	3/20/07	Admin Rev - NOE	Three exempted sources: One natural gas fired Parker boiler with a design rate of 420,000 BTU/h, located at the TA-40-11 site, one Industrial Commercial Equipment heater with design rate of 1.87 MM BTU/h and one Cleaver-Brooks boiler with design rate of 1.1 MM BTU/h, located at the TA-48-1 site. They will be used solely for heating buildings and or for personal comfort. Request received on Feb. 28, 2007.
2195R-30	12/21/06	Admin Rev - NOE	Exemption for three natural fired Sellers boilers each with a design rate of 4.4 million BTU/hr, used solely for heating buildings and personal comfort. Request received on Nov. 28, 2006
2195R-29	10/17/06	Admin Rev - NOE	Construction of a bulb crusher model 55 VRS-U, manufactured by Air Cycle Corporation. Request received on Sept. 15, 2006.
2195R-27	10/16/06	Admin Rev - NOE	Added six, fifty thousand gallon wastewater storage tanks. These tanks store wastewater contaminated with radionuclides and potentially volatile organic compounds prior to treatment by the existing wastewater facility. Request received on Aug. 31, 2006.
2195R-28	9/5/06	Admin Rev - NOE	Added a 225 kilowatt Caterpillar standby diesel generator. Request received on Aug. 31, 2006.
2195R-26	8/14/06	Admin Rev - NOE	Operation of a 300 KVA Cummins diesel powered generator and an associated 600 gallon tank near Los Alamos, New Mexico. The standby generator will only operate during unavoidable loss of utility power and operate less then 500 hours per year. Request received on July 24, 2006.
2195R-25	8/14/06	Admin Rev - NOE	Operation of a 60 kW C60HEV Microturbine. The turbine is "estimated" to operate 10 hours in order to verify performance then be delivered to an off-site Client. The 10 hour estimate is neither a limitation nor a requirement by the AQB. Request received on July 12, 2006.
*Various (2195R-24)	6/14/06	Admin Rev	Changed the name of the facility operator from the University of California to Los Alamos National Security, LLC (LANS).
2195R-23	3/28/06	Admin Rev - NOE	Constructed a 525,000 Btu/hr natural gas fired boiler to be used for heating a building for personal comfort or for producing hot water for personal use. (To be attached to 2195)
2195R-22	3/28/06	Admin Rev - NOE	Added a 1000 KW standby generator equipped with an hour meter to ensure it runs less than 500 hours per year and a 4000-gallon double wall diesel storage tank. (To be attached to 2195)

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Permit Number	Issue Date	Action Type	Description of Action (Changes)		
2195J-R1	1/17/06	Admin Rev - Closed	Canceled permit 2195J due to LANL no longer needing to perform the types of testing and activities authorized by the permit. Request received on Jan. 12, 2006.		
2195R-21	1/07/05	Admin Rev - NOE	Exempted four sources: 1) 1,100 Kw Cummins diesel powered generator; 2) 35 Kw Cummins diesel powered generator; 3) Natural gas fired Rite boiler with a design rate of 1,050,000 BTU per hour; and 4) Natural gas fired Rite boiler with a design rate of 1,155,000 BTU per hour. Request received on Dec. 13, 2004.		
2195L	1/06/05	NPR - NOI	Construction and operation of a Soil Vapor Extraction system. Emissions from the units are too low to trigger 20 NMAC 2.72 or 2.73.		
2195R-20	8/03/04	Admin Rev - NOE	Retired rock crusher associated with Permit 2195. Department acknowledged that this qualifies as an exemption and that the revisions to 2195 still apply to the extent they are not related to the retired rock crushing equipment.		
2195J	2/11/004	NPR	Construction and operation of a 35 kW (47 hp) Diesel Powered Generator. Emissions are too low to trigger 2.72 and 2.73. Request received on Dec. 22, 2003.		
2195R-18	1/6/04	Denial	Denial of Administrative Permit Revision Application 35 kW (47 hp) Diesel Powered Generator. Unit can be filed under No Permit Required (NPR) notification.		
2195R-19	1//5/04	Admin Rev - NOE	Exempted a fully enclosed bead blaster which has no air pollutants emitted to the atmosphere. Request received on Dec. 8, 2003.		
2195R-17	6/19/03	Admin Rev - NOE	Incorporated exempt equipment: (1) Electric powered Tempyrox Pryroclean Glassware Oven with a Catalytic Oxidizer. Request received on May 20, 2003.		
2195R-16	6/19/03	Admin Rev - NOE	Added one 0.23 MMBTU/hr natural gas fired heater and one 0.6 MMBTU/hr natural gas fired heater. Request received on May 19, 2003.		
2195R-15	5/2/03	Admin Rev - NOE	Added 1) two (2) dual fired 2.1 MMBTU/hr natural-gas fired boilers (capable of burning # 2 distillate oil); 2) two (2) 25,000 gallon distillate oil storage tanks; and 3) one (1) 1000 kW diesel-powered emergency generator. Request received on March 5, 2003.		
2195R-14	12/31/02	Admin Rev - NOE	Added a 500 kW diesel powered generator. This equipment will be run only in instances of unavoidable utility power failure and will be equipped with an hour meter to insure it runs less than 500 hours per year. Request received on December 19, 2002.		
2195R-13	12/30/02	Admin Rev - NOE	December 19, 2002. Added a 400 kW diesel powered generator. This equipment will be run only in instances of unavoidable utility power failure and will be equipped with an hour meter to insure it runs less than 500 hours per year. Request received on December 19, 2002.		

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Permit Number	Issue Date	Action Type	Description of Action (Changes)			
2195R-12	12/13/02	Admin Rev - NOE	Removed two exempt Honda GX 340, 8 hp, gasoline-powered generators from Permit No. 2195 R11. Request received on December 19, 2002.			
2195R-11	12/03/02	Admin Rev - NOE	Removed the exempt 40 kW diesel-fueled portable generator registered under Permit No. 2195-R9. Request received on Nov. 8, 2002.			
2195R-10	10/31/02	Admin Rev - NOE	Added a 0.08 MMBTU per hour diesel powered generator; a 0.97 MMBTU per hour natural gas fired boiler; two Air Cycle Corporation Bulb Crushers, Model 55 VRS-U; a 1.27 MMBTU per hour natural gas fired boiler; an electric powered Tempyrox Pyro-Clean Glassware oven with an Electri-Cat Oxidizer; adding a 96,000 BTU per hour natural gas fired boiler; two electric powered 600 series SAMSCO water evaporators; a 1.08 MMBTU per hour natural gas fired boiler; and an 80 kW diesel-powered generator with a 500-gallon diesel tank. Request received on October 11, 2002			
2195-R9	8/21/02	Admin Rev - NOE	at TA-21 and TA-33 for structure demolition activities. Request received on July 26, 2002.			
2195-R8	3/14/02	Admin Rev - NOE	Exempted a list of equipment designated for emergency use and domestic applications: 100 kw natural gas fueled emergency generator, natual gas fired domestic water heater, 1000 kw diesel fueled portable generator, seven (7) gasoline fueled portable generators, and a natural gas fired Sellers boiler. Requests received on Feb. 15, 2002 and March 4, 2002.			
2195C	1/22/02	Admin Rev - NOE				
2195D	1/22/02	Admin Rev - NOE	Allowed the continued use of two 2.984 MMBTU/hr natural gas fired Sellers Engineering Boilers. The boilers are used to provide heat and will be installed in another part of the facility.			
2195-R7	6/19/01	Admin Rev - NOE	Added four natural gas fired 0.08 MMBTU/HR Co – Ray burners which are exempt. Request received on May 29, 2001.			
2195-R6	3/20/01	Admin Rev - NOE	Added one MQ Power Coro. 52 HP diesel generator that is exempt. Request received on March 14, 2001.			
2195-R5	1/17/01	Admin Rev - NOE	Added one 1.21 MMBTU/hr natural gas fired boiler and one 0.075MMBTU/HR natural gas fired hot water heater. Request received on Jan. 10, 2001.			
2195-R4	10/27/00	Admin Rev - NOE	Added one 1.46 MMBTU/HR natural gas fired heater which is an exempt source. Request received on Oct. 13, 2000.			
2195-R3	5/4/00	Admin Rev – NOE - Cancelled	Added a 1.67 MMBTU/HR natural gas fired Sellers boiler which is an exempt source. Request received on May 3, 2000. Canceled 6/15/00 on LANL's request (Letter dated May 23, 2000).			

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Permit Number	Issue Date	Action Type	Description of Action (Changes)
2195-R2	3/20/00	Admin Rev - NOE	Added one 1.64 MMBTU/hr natural gas boiler and one 0.279 MMBTU/hr natural gas fired boiler. Request received on March 2, 2000.
2195-R1	2/14/00	Admin Rev - NOE	Added one 5 MMBTU/hr propane heater and one 0.2 MMBTU/hr propane heater. Request received on Jan. 25, 2000.
2195	6/16/99	New NSR	Authorized LANL to operate 150 TPH portable rock crusher source. Admin Rev. 2195-R20 retired the portable rock crusher.

¹ 2195 The Rock Crusher was removed from 2195, but permit retained to include all exempted sources 2195R1 through 2195R64. Revisions 2195C and D are part of permit 2195 exempt equipment. (See letter dated 7/10/04 – 2195 RC Deletion and Admin letter dated 6/14/06).

Notes: Per file folder, 2195J and 2195L are also a part of Permit 2195. (Note that there is another action with Permit number 2195J.)

6.0 <u>Public Response/Concerns:</u> As of permit issuance this permit action has generated public comment or concern. The extent of the public comments can be found in the permit file and electronic file entitled Hearing Decision in TEMPO.

7.0 **Compliance Testing:**

Unit No.	Compliance Test	Test Dates
TA-3-22-CT-1	Annual compliance test for NOx and CO with portable analyzer as required by NSR Permit No. 2195B.	10/23/2009
TA-3-22-CT-1	Annual compliance test for NOx and CO with portable analyzer as required by NSR Permit No. 2195B.	6/17/2010
TA-3-22-CT-1	Annual compliance test for NOx and CO with portable analyzer as required by NSR Permit No. 2195B.	1/19/2011
TA-3-22-CT-1	Annual compliance test for NOx and CO with portable analyzer as required by NSR Permit No. 2195B.	12/11/2012
CMRR-BHW- 1 through 3	Startup compliance test for NOx and CO as required by NSR Permit No. 2195N	1/18-19/2012
TA-60-BDM	Compliance test for PM, NOx and CO to increase plant throughput.	5/18/2009

8.0 Startup and Shutdown:

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? Yes
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? Yes
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? No

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- D. Were emissions from startup, shutdown, and scheduled maintenance operations calculated and included in the emission tables? No, emissions from SSM are included in the normal operating allowable emissions.
- 9.0 <u>Compliance and Enforcement Status [Title V only]:</u> Per email from Jim Nellessen dated 9/25/14 A discrepancy of compliance verification has been observed (surrounding 4 permitted boilers in CMRR RLUOB portion of lab), but no compliance plan is needed concerning permitting.
- 10.0 <u>Modeling:</u> Not applicable for this permitting action. All required modeling was completed in past NSR actions.

11.0 **State Regulatory Analysis(NMAC/AQCR):**

20	Title	Applies	Unit(s) or	Comments
NMAC	Title	(Y/N)	Facility	Comments
	CENEDAL PROVIGIONS	` ′		The feeling out is set to Title 20 Engine out of
2.1	GENERAL PROVISIONS	Yes,	Entire	The facility is subject to Title 20 Environmental
		Always	Facility	Protection Chapter 2 Air Quality of the New Mexico
				Administrative Code so is subject to Part 1 General
				Provisions, Update to Section 116 of regulation for
				Significant figures & rounding. Applicable with no
				permitting requirements.
2.3	Ambient Air Quality	No for TV	Entire	20.2.3.9 NMAC, LIMITATION OF APPLICABILITY
	Standards		Facility	TO 20.2.70 NMAC. The requirements of this part are
			,	not applicable requirements under 20.2.70 NMAC, as
				defined by that part. This section does not limit the
				applicability of this part to sources required to obtain a
				permit under 20.2.72 NMAC, nor does it limit which
				terms and conditions of permits issued pursuant to
				20.2.72 NMAC are applicable requirements for permits
				issued pursuant to 20.2.70 NMAC.
2.7	Excess Emissions	Yes,	Entire	Applies to all facilities' sources
2.1	LACOS LIMISSIONS	Always	Facility	ripplies to all facilities sources
2.11	Asphalt Process Equipment	Yes	TA-60-	The objective of this Part is to establish particulate
4.11	Aspirant Frocess Equipment	168	BDM	
			PDM	matter emission standards for asphalt process
				equipment.
2.33	Gas Burning Equipment -	Yes	TA-3-22-1,	This facility has existing gas burning equipment having
	Nitrogen Dioxide		TA-3-22-2,	a heat input of greater than 1,000,000 million British
			and TA-3-	Thermal Units per year per unit. LANL has existing
			22-3 at the	(installed in 1950 and 1951, prior to 2/17/72) gas
			TA-3	burning equipment with a heat input of greater than
			Power	1,000,000 million British Thermal Units per year per
			Plant.	unit (178.5 MMBtu/hr (site).
				()

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20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Comments
2.34	Oil Burning Equipment - Nitrogen Dioxide	Yes	TA-3-22-1, TA-3-22-2, and TA-3- 22-3 at the TA-3 Power Plant.	This facility has oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. Same units and firing capacity as above.
2.38	Hydrocarbon Storage Facilities	No	Facility	LANL does not operate tank batteries or hydrocarbon storage facilities operated in conjunction with petroleum production facilities. (20.2.38.111)
2.60	Open Burning	Yes	All open areas on the Lab property	Per 20.2.60.113 open burning of RCRA hazardous waste is allowed at the TA-16 Burn Ground, which currently operates under RCRA interim status. The rule is applicable if LANL burns vegetative material under the provisions of 20.2.60.111
2.61	Smoke and Visible Emissions	Yes	All stationary combustion sources (except TA-60-BDM and insignificant activities)	Engines, boilers, and heaters are Stationary Combustion Equipment, and unless exempt are subject to this regulation. All units in Table 800.A, 1100.A and 1300.A
2.65	Smoke Management	Yes	All open areas on the Lab property	This regulation would apply if LANL conducted prescribed burning. To date, no prescribed burning has taken place since the rule was adopted.
2.70	Operating Permits	Yes	Entire Facility	LANL a is major source as defined by the rule for NO2, CO, VOC, SO2, TSP, PM10, PM2.5, and greenhouse gas emissions and required to obtain a Title V operating permit. For each pollutant, this is based on potential to emit as opposed to actual emissions.
2.71	Operating Permit Fees	Yes	Entire Facility	Source is subject to 20.2.70 NMAC as cited at 20.2.71.109 NMAC.
2.72	Construction Permits	Yes	Entire Facility	NSR Permits are the applicable requirement, including 20.2.72 NMAC.
2.73	NOI & Emissions Inventory Requirements	Yes, Always	Entire Facility	Applicable to all facilities that require a permit. PER > 10 tpy for all criteria pollutant
2.74	Permits-Prevention of Significant Deterioration	No	Entire Facility	Source is not one of the 28 listed – PTE > 250 tpy LANL has facility-wide emission limits in Title V operating permit that limit the potential to emit for PSD pollutants to below major source status for PSD purposes.
2.75	Construction Permit Fees	No	Entire Facility	This facility is subject to 20.2.72 NMAC or TV: No, In accordance with 20.2.75.11.E an annual NSR enforcement and compliance fee shall not apply to sources subject to 20.2.71 NMAC.

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20	Title	Applies	Unit(s) or	Comments
NMAC		(Y/N)	Facility	
2.77	New Source Performance	Yes	Entire Facility (see specifics below)	Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60 and 40 CFR 60 Subparts Dc, I, GG and IIII apply.
2.78	Emissions Standards for HAPs	Yes	Entire Facility (see specifics below)	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 61 and Subparts C, H, M and Q apply.
2.79	Permits – Nonattainment Areas	No	Entire Facility	This facility is not located in a non-attainment area. Non-attainment Link
2.82	MACT Standards for Source Categories of HAPs	Yes	Entire Facility (see specifics below)	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR 63. This facility has an allowable emission limit of 24 tpy total HAPS. Facility is subject to Subparts T.

12.0 <u>Federal Regulatory Analysis:</u>

S	ir Programs ubchapter C l0 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Applies (Y/N)	Unit(s) or Facility	Comments
	C	Federal Ambient Air Quality		Entire	Independent of permit applicability; applies to all
		Standards	Yes	Facility	sources of emissions for which there is a Federal
				-	Ambient Air Quality Standard.

NSPS Subpart (40 CFR 60)	Title	Applies (Y/N)	Unit(s) or Facility	Comments
A	General Provisions	Yes	Facility	Applies if any other subpart applies and subparts Dc, I, GG and IIII apply
40 CFR 60.40b, Subpart Db,	Standards of Performance for Industrial-Commercial- Institutional Steam Generating Units	No	None	The only boilers with capacities greater than 100 MMBTU/hr (or 29 MW) are located at the TA-3 Power Plant, TA-3-22-1 through -3, but were constructed in 1950-1952, prior to the June 19, 1984 applicability date.
40 CFR 60.40b, Subpart Dc	Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units	Yes	TA-55-6- BHW-1, TA-55-6- BHW-2, CMRR- BHW-1 through CMRR- BHW-4	Applicable: facility has steam generating units for which construction, modification or reconstruction is commenced after June 9, 1989 and that have a maximum design heat input capacity of 29 MW or less, but greater than or equal to 2.9 MW.
40 CFR 60,	Hot Mix Asphalt Facilities	Y	TA-60-	Asphalt Plant was constructed or modified after

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NSPS Subpart (40 CFR 60)	Title	Applies (Y/N)	Unit(s) or Facility	Comments
Subpart I			BDM	the June 11, 1973 applicability date. (40 CFR 60.90) GCP-3 Permit issued 10/30/02.
40 CFR 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	None	All tanks at the facility are either below the applicable 75m ³ capacity threshold or store liquids that are exempt due to low vapor pressures (e.g. diesel or fuel oil)
40 CFR 60.330 Subpart GG	Stationary Gas Turbines	Yes	TA-2-22- CT-1	The Rolls-Royce combustion turbine at the TA-3 Power Plant, with heat input = 32 MW which is greater than the 2.9 MW (10 MMBtu/hour) threshold. Unit was manufactured in 2003, which is after the October 3, 1977 applicability date.
40 CFR Part 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	N	None	The only gas turbine onsite is Unit TA-2-22-CT-1 which was manufactured in 2003 which is before the applicability date of February 18, 2005.
40 CFR Part 60 Subpart IIII (Quad-I)	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Yes	RLUOB- GEN-1 through RLUOB- GEN-3, TA-48- GEN-1 and TA-55- GEN-1, 2	(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

NSPS Emissions Standards

	NSPS 40 CFR 60 Subpart IIII								
Source	40 CFR 60	NOx g/KW-hr (g/Hp-hr)	HC g/KW-hr (g/Hp-hr)	CO g/KW-hr (g/Hp-hr)	PM g/KW-hr (g/Hp-hr)				
Emergency Generators RLUOB-GEN- 1 thru -3 and	Subpart IIII Table 1	9.2 (6.9)	1.3 (1.0)	11.4 (8.5)	0.54 (0.4)				
Emergency Generators TA-55-GEN-3	§4202(a)(2)	See Tier 2 Standards for Rated Power kW>560 in 40 CFR §89.112							
Emergency Generators TA-48-GEN-1	§4202(a)(2)	See Tier 3 Standards for Rated Power 130 <kw<225 40="" cfr="" in="" td="" §89.112<=""></kw<225>							
Emergency Generators	§4202(a)(2)	See Tier 2	See Tier 2 Standards for Rated Power 19 <kw<37 40="" cfr="" in="" td="" §89.112<=""></kw<37>						

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TA-55-GEN-1		
and TA-55-		
GEN-2		

NESHAP Subpart (40 CFR 61)	Title	Applies (Y/N)	Unit(s) or Facility	Comments
A	General Provisions	Yes		Applies if any other subpart applies and subparts C, H, M and Q apply.
40 CFR 61 Subpart E	National Emission Standards for Beryllium	Yes	Units: TA-3-141, TA-35- 213, TA- 55-PF4, TA-3-66, TA-16- 207, and TA-35-87	LANL houses facilities that contain machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5 percent beryllium by weight. Applicable to beryllium operations. (61.30)
40 CFR 61 Subpart H	National Emission Standards for Radionuclides other than Radon from DOE Facilities	Yes	Entire Facility	Certain operations at LANL facilities (owned or operated by the Department of Energy) emit radionuclides other than radon-222 and radon-220 into the air and are thus subject to the provisions of this subpart. (61.90)
40 CFR 61 Subpart M	National Emission Standard for Asbestos	Yes	Entire Facility	LANL participates in demolition and renovation activities involving asbestos and operates an active asbestos on-site disposal site. (61.145 Standard for demolition and renovation and 61.154 Standard for active waste disposal sites.)
40 CFR 61 Subpart Q	National Emission Standards for Radon Emissions from DOE Facilities	Yes	Entire Facility	The provisions of this subpart apply to the design and operation of all storage and disposal facilities for radium-containing material (i.e., byproduct material as defined under section 11e(2) of the Atomic Energy Act of 1954 (as amended)) that are owned or operated by the Department of Energy that emit radon-222 into air. (61.190)

MACT Subpart	Title	Applies	Unit(s) or	Comments
(40 CFR 63)		(Y/N)	Facility	
A	General Provisions	Yes		Applies if any other subpart applies and Subpart
				T applies
40 CFR 63	National Emission Standards	Yes	TA-55-	LANL operates a solvent cleaning machine with
Subpart T	for Halogenated Solvent		DG-1	regulated solvents at Emission Unit TA-55-DG-
	Cleaning			1, the degreaser.
				Use of any solvent that contains methylene
				chloride (CAS No. 75–09–2), perchloroethylene
				(CAS No. 127–18–4), trichloroethylene (CAS
				No. 79–01–6), 1,1,1-trichloroethane (CAS No.

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MACT Subpart (40 CFR 63)	Title	Applies (Y/N)	Unit(s) or Facility	Comments
				71–55–6), carbon tetrachloride (CAS No. 56–23–5) or chloroform (CAS No. 67–66–3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this subpart. (63.460(a))
40 CFR 63 Subpart ZZZZ (Quad Z)	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	N	None	The facility removed the only remaining stationary RICE (TA-33-G-1) that was subject to the regulation. It was removed under NSR permit 2195F-R4. All other RICE engines at LANL are either non-road engines or emergency generators at an institution and are thus exempt from the regulation.
40 CFR 63 Subpart DDDDD	National Emissions Standards for Hazardous Air Pollutants for	N	None	

Miscellaneous	Title	Applies (Y/N)	Unit(s) or Facility	Comments
40 CFR 64	Compliance Assurance Monitoring	No	None	Facility has taken federally enforceable production limits for both the asphalt plant and data disintegrator to limit the PTE below the 100 tpy applicability limit for uncontrolled emission rate for all pollutants.
40 CFR 68	Chemical Accident Prevention	No	None	Part 68 implements the risk management planning requirements of Section 112 (r) of the Clean Air Act. It requires risk management planning if the quantity of a regulated toxic or flammable substance stored or used in a process exceeds threshold quantities specified by the rule. There are no LANL processes to which the Part 68 is applicable. New LANL processes are reviewed for Part 68 applicability to ensure the rule is not triggered.
40 CFR 70	Title V- State Operating Permit Programs	No		Operating Permit Program – is not applicable – New Mexico State has full delegated authority and Title V is administered under 20.2.70 NMAC.

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Miscellaneous	Title	Applies	Unit(s) or	Comments
		(Y/N)	Facility	
Title VI –	Protection of Stratospheric	Yes	Entire	B- LANL maintains motor vehicle air
40 CFR 82	Ozone		Facility	conditioners and is subject to the rule.
Subparts B, F, H				F - LANL maintains equipment with regulated
and I				refrigerants and is subject to the rule.
				H - LANL maintains equipment with regulated
				halons and is subject to the rule.
				I - LANL is subject to the prohibitions on sale
				or distribution of HCFC containing equipment
				as specified in the rule.

13.0 Exempt and/or Insignificant Equipment that do not require monitoring:

Title V - INSIGNIFICANT ACTIVITIES (Dated March 24, 2005) as defined by 20.2.70.7.P NMAC:

Source Category	NMED List Citation	Basis for Designation
Boilers and Heaters	1a, 3, 4	The majority of boilers and heaters at LANL are insignificant activities under Insignificant Activity No. 3 and 4, based on size, type of fuel, and purpose of the equipment. See Section 2.3 for more details.
Cooling Towers	1a	Each cooling tower has emission rates less than 1 ton per year (tpy)
Degreasers	1a	LANL operates one permitted degreaser. See Section 2.x for details. There are no other degreaser units that use regulated solvents. Degreaser- operations facility-wide - have emission rates less than 1 tpy.
Electroplating	1 a	Electroplating operations have emission rates less than 1 tpy.
Environmental Restoration	1a	Environmental restoration activities have emission rates less than 1 tpy.
Lead Melting	1a	Lead melting operations have emission rates well below 1 tpy.
Open Detonation Sites	1a	Each site where detonation experiments occur has emission rates less than 1 tpy.
Paint Booths	1a	Paint booth operations at LANL have emission rates less than 1 tpy.
Sand Blasting	1a	Self-contained sand blasting operations were reviewed and found to have emission rates well below 1 tpy.
Internal Combustion Sources	6, 7	LANL operates numerous stationary standby generators and portable generators that meet the definition of insignificant emission units. See Section 2.7 for details.

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Source Category	NMED List Citation	Basis for Designation
Storage Tanks >500 gal	1a, 5	LANL has only 2 tanks greater than 500 gallons that store liquid with vapor pressure great than 10 mm Hg. These two tanks (nitric acid and hydrochloric acid) have emission rates below 1 tpy (Insignificant Activity 1a). All other tanks are either smaller than 500 gallons, or store liquids with vapor pressure less than 10 mm Hg (Insignificant Activity 5).
Surface Coating	2	Total clean-up solvent and coating use at LANL results in emissions of less than (2) tpy.
Waste Management	1a	Waste management activities at TA-50 and TA-54 do not generate emission in excess of 1 tpy
Welding	1 a	Site-wide emission from annual welding rod usage is less that 1 tpy.

Miscellaneous Boiler Summary Description

Percentage of Boilers Within Category	Approximate Sum of Design Ratings for Category (MMBtu/hr)	Functional Category	Design Rate Range (MMBtu/hr)	Status ¹
75.7	220.4	Comfort Heat	≤5	NMED Insignificant Activity #3
9.8	20.2	Comfort and Process Heat	<2.3	NMED Insignificant Activity #1
7.5	42.5	Comfort and Process Heat, Low NO _x	<6.3	NMED Insignificant Activity #1
6.9	90.9	Comfort and/or Process Heat	>5.3 and <12.4	Non-Exempt

14.0 **New/Modified/Unique Conditions** (Format: Condition#: Explanation):

See section 16 below.

15.0 For Title V action: Cross Reference Tables between NSR Permits and TV Permit P100-R2.

NSR permit conditions cross referenced to the TV permit are federally enforceable conditions, and therefore brought forward into the TV permit:

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Conditions Cross Reference Table between NSR Permit GCP-3-2195G and TV Permit P100R2: A600: Asphalt Production (Note that the original permit was issued to LANL on 10/29/02 and a revised GCP-3 permit was issued on 9/12/06)

NSR Changed by TV*	NSR Condition #	TV Section #
	I. Applicability	NSR Unique
	II. Registration Process	NSR Unique
	III. Facility Operating Req.	NSR Unique
	IIIA. General Terms and Conditions	NSR Unique
	IIIA.1 Regulated Equip	Table 600.A
	IIIA.2 Install, operate, and maintain equip. in accordance with manufacture's specifications	A607.F(1)
	IIIA.3 Facility shall use only the following to fuel engines and heaters.	A605.A
*	IIIA.4 Facility shall not exceed 600 tons of asphalt per hour	Table 600.A: Design capacity of plant is 60 tph.
	IIIA.5 A copy of the registration forms, GCP Shall be maintained onsite	NSR Unique
	IIIA.6 No visible emissions shall be observed crossing the perimeter of the restricted are for more than five (5) minutes during any two consecutive hours.	A607.G, Emission limits
	III.A.7 The use of 2.0% mineral filler is the maximum allowed under this permit	NSR Unique
	III.A.8 Facility shall operate during daylight hours only. Shall not operate for more than 4,380 hours	A604.A
	III.B Applicable Regulations	Table 603.A
	III.C Siting Restrictions	NSR Unique
	III.D Relocation	NSR Unique
	III.E Co-locations	NSR Unique
	III.F Emissions Restrictions and Conditions	NSR Unique
	1. The owner or operator shall equip the facility's asphalt processing equipment with dust control systems to control PM emissions. Such control devices shall be maintained in proper working order. The owner/operator shall:	A607.F
	1a) Maintain and operate dust control systems such that fugitive dust from the	A607.G

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NSR Changed by TV*	NSR Condition #	TV Section #
	Asphalt Processing Equip. shall exhibit no more than 5 min. of visible emissions in any 2 consecutive hours. Compliance with this condition shall be determined in accordance with Method 22.	
	1b) Sequester or remove particulates collected by the control equip. to prevent win-blown particulate emissions. Recycled baghouse and/or fabric filters fines shall be recycled into the drum mixer via a closed loop system.	A607.D
	1c) Maintain and operate dust control systems such that stack emissions from each piece of dust control equipment do not exceed concentrations of 90 mg/dscm (0.04 grains/dry standard cubic foot) of particulate matter and shall not exhibit twenty percent opacity or greater.	A607.C and emission limits
	1d) Equip baghouses and fabric filters with a device to continually measure the pressure drop across the baghouse.	A607.A
	1e) Equip wet scrubbers (if applicable) with a device to continuously measure water pressure	N/A
	2. Mineral filler silos shall be equipped with audible and visual alarms, which activate prior to silo being 95% full.	N/A The facility does not have a silo.
	3. All displace air from mineral filler silos shall pass through a baghouse or fabric filter before being vented. The fabric filter shall be no less than 95 % efficient by design and shall be kept in good repair.	N/A The facility does not have a silo.
	4. Stack height for the asphalt plant and mineral filler silo(s) shall be no less than 10 meters.	A607.B
	5. The facility's silo filter(s) shall exhibit visible emissions for no more than 5 min. in any consecutive 2 hour period.	N/A The facility does not have a silo
	6. Equip and operate all screens, conveyor belts, and conveyor transfer points with fugitive dust control systems sufficiently effective so that there are no	A607.G

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NSR Changed by TV*	NSR Condition #	TV Section #
	more than five (5) minutes of visible emissions during any two consecutive hours.	
	7. No visible emissions from the facility shall cross the perimeter of the restricted area.	A607.F
	8. Control fugitive emissions to the atmosphere from haul roads between the perimeter of the area of operation and property boundary by the methods listed in table III.F.1.	All facility roads are paved
	III.G Other Emissions Limitations	NSR Unique
	1. Annual emissions from the facility, including fugitive sources of emissions shall not exceed the limits in table III.G.1	N/A – Facility chose a lower annual emission limit.
	III.H Req. for Stationary ICE	NSR Unique
	1. Does not apply to tailpipe emissions from engines used to propel vehicles on the property	NSR Unique
	2. All combustion source emissions shall be vented vertically.	NSR Unique
	3. Emissions from stationary internal combustion engines and heaters shall not exhibit greater than 20% opacity.	A607.C
	IV. Monitoring, Recordkeeping and Notification Req.	NSR Unique
	IV.A. Monitoring	NSR Unique
*	1. Shall perform a six min. opacity reading on each screen, conveyor drop point and hopper at least once per month using Method 9.	A607.C and A607.G – Note GCP3-Rev1 (current version) incorrectly states the required Method test. The subsequent revision to the GCP-3 will correct this error. The TV permit requires Method 9 for the rotary dryer /baghouse stack and Method 22 for the other equipment.
	2. Monitor the differential pressure (inches of water) across the filters by the use of a differential pressure gauge. Pressure gage readings and the current operational status of heater drum(s) and	A607.A Note LANL does not have a silo.

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NSR Changed by TV*	NSR Condition #	TV Section #
	silo loading shall be recorded by a CEMS or data logger each time the heater drum is operating or a silo is being filled. The pressure data shall confirm whether the filters are operating within manufactures specifications	
	3. Shall continuously monitor the differential pressure across the scrubber, the water inlet flow rate (gallons per min) and the water inlet pressure (pounds per square inch).	NSR Unique
	IV.B Recordkeeping	NSR Unique
	1. Compliance will be based on Dept. inspections of records and logs.	NSR Unique
	2. Retain records for at least 2 years after collection either onsite or local business office.	Per Section B110, Title V facilities must maintain all records for 5 years
	3. Collect and retain the following records:	NSR Unique
	3a. Actual hours of operation 3b. Monitoring required under subsection IV.A – Monitoring	A604.A A607.F
	3c. Daily and weekly total asphalt production and weekly rolling 12 month total production.	A607.E Addition of annual production limit of 6,000 tpy, to avoid 40 CFR 64 (CAM) for PM.
	3d. Number of haul truck trips per day including materials delivery and product	A607.F
	3e. Fuel delivery manifest that states that the fuel type as gasoline, natural gas, LPG (propane) or the manifest states the sulfur content by weight percent of used oil and number of gallons purchased. In addition, for used oil	A607.F
	3f. The quantity and frequency of water or surfactant application to haul roads.	N/A all roads paved.
	3g. The frequency of haul road sweeping (if paved).	A607.F
	3h. Other haul road control measures (if used)	NSR Unique
	3i. Copies of the manufacture's (or applicant's proposed) maintenance req. and records demonstrating conformance	A607.F

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NSR Changed by TV*	NSR Condition #	TV Section #
	3j. For facilities using a scrubber as a control device, records of water flow	NSR Unique
	3k. Weekly available horsepower at the site and the maximum available horsepower of equipment listed in subparagraph II.C.5.f at any time during the previous 52 weeks.	NSR Unique
	IV.C. Department Notification	NSR Unique
	IV.D Compliance testing	Per Section B110, Title V facilities must maintain all records for 5 years

Conditions Cross Reference Table between NSR Permit 632 (Dec. 26, 1985) - TA-35-213 and TV Permit P100R2: A700: Beryllium Activities

NSR Changed by TV*	NSR Condition #	TV Section #
*	1. Beryllium emsissions (TA-35-213) to the atmosphere shall not exceed 4×10^{-7} pounds per hour $(4 \times 10^{-7} \text{ tons per year})$	Section A700
*	2. Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available for inspection by the division for a min. of 2 years.	Per Section B110, Title V facilities must maintain all records for 5 years

Conditions Cross Reference Table between NSR Permit 634-M2 (Oct. 30, 1998) -TA-3-141 and 634-M2 ($see\ note$) (Nov. 2, 1998) – TA-3-39 and TV Permit P100R2: A700: Beryllium Activities

NSR Changed by TV*	NSR Condition #	TV Section #
	1. Modification and Operation	Section A700
	1a) Operation with application	Section A700
	1b) Regulated equipment. All processes shall be exhausted through a HEPA filtration system prior to entering the atmosphere. Powder operations, other than closed glovebox operations, and machining operations, other than the processes used	Section A700

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NSR Changed by TV*	NSR Condition #	TV Section #
	in metallographic preparation shall be exhausted through a cartridge filtration system then through the HEPA filtration system. Metallographic preparation activities shall be conducted in lubricating baths or	
	equivalent.	S-4: A700
	1c) Continuous operation1d) Changes in plans, specifications, and other representations as stated in application	Section A700 Section A700
	1e) Beryllium processed by the facility will not exceed 10,000 pounds per calendar year. Beryllium processed by the facility will not exceed 1000 pounds per day.	Section A700
	1f) Facility exhaust stack will be equipped with a continuous emission monitor used to measure beryllium emissions. The continuous emission monitor will be maintained in accordance with the Laboratory's quality program.	Section A700
	1g) Applicable requirements	Section A700
	2) Emission Rates	Section A700
	The Be stack emissions from the facility shall not exceed 0.35 gm/24 hr and shall not exceed 3.5 gm/yr.	Section A700
	3. Monitor Requirements	Section A700
*	Be emissions from the exhaust stack shall be continuously monitored/sampled using the methods identified in a letter	Section A700
	Cartridge and HEPA filters shall be equipped with differential pressure gauges that measure the differential pressure across the cartridge and HEPA filters while the exhaust fans are in operation.	Section A700
	4. Recordkeeping	Section A700
*	Generate and maintain beryllium inventory records to demonstrate compliance with permit condition 1(e). Record pressure drop across the cartridge	Section A700

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NSR Changed by TV*	NSR Condition #	TV Section #
	and HEPA filters once per day that the exhaust fans are in operation and the facility is occupied.	
	Record control equipment maintenance and repair activities.	
	Records shall be maintained on-site for a min. of 2 years.	
	5) Reporting	Section A700
	5a) Anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date.	Section A700
	5b) Actual date of initial startup of each new or modified source within fifteen (15) days after the startup date.	Section A700
	5c) Provide the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.	Section A700
	5d) change in owner or operator	Section A700
	5e) any necessary update or correction	Section A700
*	5f) Notify the Department within 60 days after each calendar quarter of the facility's compliance status with condition 2(a).	Section A700
	5g) Provide any data generated by activities described in the QAP that will assist the Air Quality Bureau's Enforcement Section in determining the reliability of the methodology used for demonstrating compliance with the permitted emission rate within 45 days of such a request.	Section A700
	6. Compliance Test	Section A700
*	Initial compliance tests required for the Be emissions from the Be stack.	Section A700
	Installation of a 100 MBTU/hr evaporator for the purpose of reducing the volume of coolant waste generated. (TA 3-39) (634-M2)	Section A700

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Note: 634-M2 for TA3-39 should have been labeled differently, perhaps 634-M2-R1.

Conditions Cross Reference Table between NSR Permit 1081-M1 (July 1, 1994), 1081-M1-R1 (March 11, 1998), 1081-M1-R3 (Feb. 11, 2000), 1081-M1-R5 (Feb. 21, 2002) and 1081-M1-R6 (May 12, 2006) and TV Permit P100R2: A700: Beryllium Activities

NSR Changed	NSR Condition #	TV Section #
by TV*		
	1. Revision and Operation	Section A700
	1a) This permit includes surface cutting	Section A700
	along with grinding during metallographic	
	specimen preparationlubricant may be	
	used as a substitute for kerosene. (1081-	
	M1)	
	1b) The facility is authorized to operate	Section A700
	24 hour per day, 7 days per week	
	The equipment regulated by this permit	
	includes Machining operations consisting of: weld cutting, weld dressing, or	
	metallography and foundry operations	
	consisting of a vacuum induction melt	
	furnace. Emissions from these processes	
	shall be ducted through the control equip.	
	specified by condition 3 and exit from	
	either stack no. 1 (south stack) or stack	
	no. 2 (north stack). (1081-M1-R3). Weld	
	dressing operations further defined in	
	1081-M1-R5)	
	1c) Be processing shall not exceed 20 kg	Section A700
	(44lbs) per hour for any 24-hr period and	
	shall not exceed 500 kg (1100 lbs) for any	
	given year using a rolling average. (1081-	
	M1-R3)	
	1d) The existing vacuum furnace shall be	Section A700
	replaced with a CM Model 1712 electric	
	furnace. The electric furnace shall be	
	enclosed in a glove box, have a maximum	
	operating temperature of 1600 degrees	
	centigrade, and an inside volume space	
	less than 1.1 cubic feet. (1081-M1-R6)	G .: A700
	2. Emission Limits	Section A700
	Beryllium and Aluminum Emission	Section A700
	Limits (1081-M1-R3)	Castian A700
	The total beryllium emissions for this	Section A700

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NSR Changed by TV*	NSR Condition #	TV Section #
	facility including machining and foundry operations shall not exceed the emission limits listed in the above table. (1081-M1-R3)	
	3. Control Equipment and Control Efficiencies	Section A700
	The metallographic specimen preparation of beryllium metal, which now consists of surface cutting and grinding operations, shall be conducted in lubricating baths as given in permit application dated 12/6/93.	Section A700
	Weld cutting, weld dressing, metallography, and electric furnace operations shall be controlled with 4 HEPA filters with a control efficiency of 99.95% each. (1081-M1-R3)	
*	Control efficiencies shall be verified by weekly HEPA filter pressure drop tests and annual HEPA filter challenge tests of accessible filters. (1081-M1-R1)	Section A700
*	A copy of the annual HEPA test, a log of the weekly pressure drop readings and a control equipment maintenance log shall be kept. This documentation shall be provided upon request. (1081-M1-R1)	Section A700
	The non-accessible filters shall be replaced when the pressure drop across the filter either falls to levels indicating filter breakthrough or increases to levels indicative of excessive loading. (1081-M1-R1)	Section A700
	A log of the filter replacement shall be kept and shall be made available to the Department personnel upon request. (1081-M1-R1)	Section A700
	4. Compliance Tests and Test Methods (modified in 1081-M1-R3)	Section A700
	5. Revisions and Modifications	Section A700
	6. Notification to Subsequent Owners7. Right to Access Property and Review Records	Section A700 Section A700

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NSR	NSR Condition #	TV Section #
Changed by TV*		
	8. Posting of the Permit	Section A700
	9. Recordkeeping	Section A700
	Stack emission test results and facility	Section A700
	operating parameters including a daily	
	record of the pressure drop measured	
	across each appropriate HEPA plenum	
	filtration stage, when the exhaust fans are operating. Shall be maintained at the	
	source for a min. of 2 years (1081-M1-	
	R3)	
	The permittee shall keep records of the	Section A700
	number and weight of classified parts	
	processed during a 24-hour period and	
	year using a rolling total. Records shall	
	be made available to properly cleared	
	Department personnel upon request. Shall	
	be maintained at the source for a min. of 2	
	years (1081-M1-R3)	G .: 4700
	The permittee shall for each use of the	Section A700
	furnace record the following operating	
	parameters: metal type, theoretical	
	melting point of the metal, metal melt duration once melting is commenced,	
	maximum furnace temperature and glove	
	box flow rate. (1081-M1-R6)	
	10. Reporting	Section A700
	10a-d) General Reporting conditions	Section A700
	10e) Notification of startup of the	Section A700
	Vacuum induction melt furnace (1081-	
	M1-R3)	
	10f) HEPA filtration system malfunctions	Section A700
	as soon as possible, but no later than 24	
	hours after the start of the next regular	
	business day and report in accordance	
	with 2.7 NMAC (1081-M1-R3)	
	11. Monitoring	Section A700
	The HEPA filtration systems shall be	Section A700
	equipped with a differential pressure	
	gauge that measures the differential	
	pressure (inches of water) across the	
	HEPA filters while the exhaust fans are in	
	operation. (1081-M1-R3)	

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NSR Changed by TV*	NSR Condition #	TV Section #
	The furnace temperature shall be continuously monitored and the flow rate from the glove box containing the furnance shall be measured once during each metal melt operation. (1081-M1-R6)	Section A700

Note: NSR Permit 1081-M1-R5 updates the description of the weld bead dress operation and emissions control equipment.

NSR Permits 1081-M1-R2 and 1081-M1-R4 install and remove an exempt temporary diesel genset and thus are not carried into the Title V permit.

Conditions Cross Reference Table between NSR Permit 2195F-R4 and TV Permit P100R2: A1100: Internal Combustion Sources

NSR Changed by TV*	NSR Condition #	TV Section #
	A104, Table 104 Regulated source list	Section A1100, Table 1100.A
	A106, Table 106.A Allowable Emissions	Table 1102.A Allowable
		Emissions
	A110 Fuel Sulfur Requirement	A1105 Fuel Sulfur Requirement
	A111 20.2.61 NMAC Opacity	A1106 20.2.61 NMAC Opacity

Conditions Cross Reference Table between NSR Permit 2195P and 2195P-R3 and TV Permit P100R2: A1100: Internal Combustion Sources

NSR Changed	NSR Condition #	TV Section #
by TV*		
	1. Construction and Operation	Section A1100
	1a) Table 1.1 Regulated equipment list	Table 1100.A (Added allowable
		location per 2195P-R3)
	1b) Each generator engine (TA-33-G2,	Condition A1104.C
	TA-33-G3, and TA-33-G4) are authorized	
	to operate 500 hours per calendar year.	
	1c) Each generator engine (TA-33-G2,	Condition A1104.C
	TA-33-G3, and TA-33-G4) shall be	
	certified to compliance with applicable	
	non-road emission standards in 40 CFR	
	89.	
	1d) Applicable requirements	Table 1103.A
	2. Emission Limits Table 2.1	Table 1102.A
	2a) Visible emissions shall not equal or	Condition A1106.A

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NSR Changed by TV*	NSR Condition #	TV Section #
	exceed an opacity of 20 %.	
	3. Monitoring Requirements	Condition A1106.A
	3a) During initial daily cold startup of each generator engine, the permittee shall determine compliance with Condition 2a using EPA Method 9 for a minimum of ten (10) minutes. i) Corrective action shall be taken for all instances when visible emissions exceed 20% opacity. ii) The monitoring requirement shall be reduced to one time per year for each generator engine demonstrating	Condition A1106.A
	compliance during four consecutive startups.	
	4. Recordkeeping	Condition A1104.C
	4a) Record annual total hours of operation for each generator engine every calendar year.	Condition A1104.C
	4b) Record opacity readings for each generator engine cold startup and corrective action to address visible emission exceedances.	Condition A1106.A
	4c) For each generator engine, maintain a copy of the engine certification to the applicable non road Emission standards in 40 CFR 89.	Condition A1104.C

Conditions Cross Reference Table between NSR Permit 2195H and TV Permit P100R1M1: A1200: Data Disintegrator

NSR Changed by TV*	NSR Condition #	TV Section #
	1. Construction/Modification/Revision and Operation	Section A1200
	a) Operation	Condition A1204.A (modified in P100-R2 to avoid 40 CFR 64)
	b) Regulated equipment list	Section A1200
	c) Applicable requirements/regulations	Section A1200
	d) Maintenance and Repair on cyclone and cloth tube filter	Section A1200

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NSR Changed by TV*	NSR Condition #	TV Section #
	2. Emission Limits	Section A1200
	Table 2.1	Section A1200
	3. Monitoring Requirements (No specific conditions)	Section A1200
	4. Recordkeeping	Section A1200
	a) Maintain records of cyclone and cloth tube filter maintenance and repair	Section A1200
	5. Reporting (No specific conditions)	Section A1200
	6. Compliance Test	Section A1200

Conditions Cross Reference Table between NSR Permit 2195BM2 and TV Permit P100R2: A1300: Power Plant at Technical Area 3 (TA-3-22)

NSR	NSR Condition #	TV Section #
Changed by TV*		
	1. Construction/Modification/Revision	Section A1300
	and Operation	
	a) Regulated equipment list	Section A1300
	b) Operational hours	Section A1300
	c) Applicable requirements/regulations	Section A1300
	d) Compliance with Subpart GG	Section A1300
	e) Unit CT-1 shall be equipped with DLE	Section A1300
	control technology to control NOx	
	emissions	
	f) Unit CT-1 operated at full load	Section A1300
*	g) Boilers shall used pipeline quality	Section A1300
	natural gas containing less than or equal	
	to 0.05% sulfur by weight	
	i. Fuel oil usage restriction for boilers	Condition A1304.B (added in
		P100-R2 to avoid 40 CFR 63,
		Subpart JJJJJJ)
*	ii. Natural gas usage restriction for	Section A1300
	boilers	
	h) Volumetric fuel flow meter shall be	Section A1300
	installed to continually record natural gas	
	used by boilers	
	i) Unit CT-1 shall use pipeline quality	Section A1300
	natural gas containing no more than 2	
	grains of sulfur per 100 scf.	

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NSR	NSR Condition #	TV Section #
Changed by TV*	TIGIN Condition #	1 V Section #
~ J = 1	j) Unit CT-1 shall not use more than 646	Section A1300
	MMSCF of natural gas in any 365 year	
	period	
	k) Volumetric fuel flow meter shall	Section A1300
	continuously measure the amount of	
	natural gas used by CT-1	
	l) Hours of operation of boilers and	Section A1300
	turbine shall be monitored and recorded	
	daily	2 1 1200
	m) Boilers are subject to 20.2.34 NMAC	Section A1300
	Gas Burning Equipment	G .: A1200
	n) Boilers are subject to 20.2.34 NMAC	Section A1300
	Oil Burning Equipment	Section A1300
	o) Facility subject to 20.2.61 NMAC 2. Emission Limits	Section A1300
	Tables 2.1 & 2.2	Section A1300
	b) NOx limit of 0.3 ppm BTU of heat	Section A1300
	input from boilers	Section A1300
	c) Visible emissions shall not exceed	Section A1300
	20% opacity	Section 111300
	d) NOx emissions from CT-1 shall not	Section A1300
	exceed 25 ppmv at 15% O ₂	
	3. Monitoring Requirements	Section A1300
	a) Monitor fuel oil consumption daily	Section A1300
	b) Monitor natural gas consumption daily	Section A1300
	c) Certification of total sulfur content	Section A1300
	shall be obtained whenever supplier	
	delivers fuel oil	
	d) Analyze total sulfur content of fuel oil	Section A1300
	if certification is not received	
	e) Operating load of CT-1 shall be	Section A1300
	monitored	g : 41000
	f) Natural gas usage for CT-1 shall be	Section A1300
	monitored as to calculate a rolling 365-	
	day total	Section A1300
	g) Compliance with NOx lb/h emission limits for CT-1	
	h) Compliance with CO lb/h emission limits for CT-1	Section A1300
	i) Use methods specified in 3.g and 3.h to	Condition A1307.H (updated
	determine compliance of CT-1 each	periodic testing language in
	quarter	P100-R2)

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NSR Changed by TV*	NSR Condition #	TV Section #
	4. Recordkeeping	Section A1300
	a) Maintain records of total sulfur content of fuel oil used by boilers	Section A1300
	i) Records of fuel supplier certifications	Section A1300
	ii) Records of fuel oil analysis	Section A1300
	b) Records to verify natural gas used is pipeline quality	Section A1300
	c) Maintain records required by Specific Condition 3.	Section A1300
	5. Reporting	Section A1300
	a) Records required by Specific Condition 3 shall be reported to the Dept. upon request	Section A1300
	6. Compliance Test	Section A1300
*	a-c) Initial compliance tests for Unit CT-	Section A1300

16.0 Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.

A. In response to comments certain special conditions and modifications were inserted into the Title V permit after the comment period. A complete listing of the post public notice changes can be found in the file: Final (P100R2) w comments.

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